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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,898	07/23/2001	Yoshio Sugaya	211758US0	9196

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EXAMINER

ZITOMER, FRED

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 05/08/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

T.D-6

# Office Action Summary

Application No.  
**09/909,898**

Applicant(s)  
**Sugaya et al.**

Examiner  
**Fred Zitomer**

Art Unit  
**1713**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 20) ☐ Other:

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1.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1 and 2 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2 of copending Application No. 09/909,904. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al., US 5,759,373, taken with Tomoi et al., US 5,350,523.

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Terada '373 teaches porous anion exchange membranes comprising strong base anion exchange resins, thermoplastic support polymers absent exchange groups and the instant amounts thereof [column 4, line 8 - column 5, line 12]. Vinylbenzyltrimethylammonium chloride and derivatives thereof, i.e. polymers in the class of and/or encompassing resins within instant formula (1), are disclosed [column 5, lines 4-11]. The membranes are useful in electrodialyzers [column 3, lines 63-65]. Tomoi teaches anion exchange resins within instant formulas (1) and (2) [Abstract; column 3, lines 9-51]. More directly, component "n" of Tomoi is 3-18 which corresponds to and encompasses instant components "A" [column 3, lines 33-39]. The resins are characterized by enhanced thermal stability [column 3, lines 40-51]. It would have been obvious to prepare anion exchange membranes of the instant composition in the expectation of obtaining a separation component for electrodialytic devices because the required anion exchange resin, the thermoplastic support polymer and the suitability of the resultant composition for the intended disclosed purpose were all known at the time of the instant invention.

3.

Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al., US 5,759,373, taken with Tomoi et al., US 5,350,523, as applied to claim 1-4, 11 and 12 above, and further in view of MacDonald, US 5,045,171.

MacDonald teaches preparing membranes for electrodialysis apparatuses comprising a quaternary ammonium ion monomer [column 4, lines 52-59] and a thermoplastic support [column 8, lines 5-13] by mixing the two components and polymerizing the monomer [column 8, lines 13-

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24]. While MacDonald is silent on the irradiation step of present claim 10, the examiner takes notice that the kind of polymerizations described by MacDonald and the primary references are typically initiated with actinic irradiation. The embodiment is therefore obvious and not deemed to impact patentability. It would have been obvious to prepare anion exchange resins by mixing an ionic monomer with a thermoplastic polymer and then polymerizing the monomer because MacDonald teaches the procedure.

4.

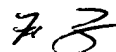
Tomoi et al., US 5,518,627, teaches anion exchange resins comprising instant formula (1) and (2) monomer units.

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Zitomer whose telephone number is (703) 308-2461. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful David Wu can be reached at (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 (before final) and (703) 872-9311 (after final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



FRED ZITOMER, PhD  
PRIMARY EXAMINER  
ART UNIT 1713

Zitomer/fz  
May 3, 2002